

Michigan Clean Diesel Initiative Meeting Minutes
Cummins Bridgeway, New Hudson, MI
March 25, 2008

Participants

Donna Davis, Michigan Department of Environmental Quality
Judy Murphy, Cummins Bridgeway, LLC
Bob Chaprnka, Michigan Railroad Association
John Dabels, EV Power Systems
Carol Panagiotides, Michigan Department of Environmental Quality
John Zappala, Okemos School District
Audrey Wierenga, Michigan Department of Environmental Quality
Molly Polverento, Michigan Environmental Council
Erin Newman, Region V, U.S. Environmental Protection Agency
Steve Marquardt, Region V, U.S. Environmental Protection Agency
Bob Rusch, Michigan Department of Environmental Quality
Mary Maupin, Michigan Department of Environmental Quality
Mary Lee Hultin, Michigan Department of Environmental Quality
Lisa Goldstein, Southwest Detroit Environmental Vision
Julius Rim, Greenpower Energy Corporation
Dana Brewster, Engine Control Systems, Ltd.
Chuck Hamlin Cummins Bridgeway, LLC
Dan Shanahan, CabAire, LLC
Dr. Vincent Nathan, City of Detroit Department of Environmental Affairs
Steve Purdy, WW Williams
Chuck Kier, TRG
David Shaw, Clean Emissions Fluids
Bob Berger, Washtenaw County Road Commission
Ed Rogers, Walmart Stores, Inc.
Hyland Lyle, Caterpillar
C.W. Pyan, Green Power
Bryan Lake, Thermo King Michigan
Dave Granning, Thermo King Michigan
Mark Caracciolo, Tri-County International
Rachel Kuntzsch, Next Energy and Greater Lansing Area Clean Cities Coalition
Sean Reed, Clean Energy Coalition
Dennis Soch, Kellogg Company
Roger Kuchar, Navistar Inc.
Brian Schultz, Michigan CAT
Matthew Caldwell, Cummins Bridgeway, LLC
Dan Scherer, Meijer
David Hoover, Meijer
Terry Russell, EV Power Systems
Roy Walters, Detroit Public Schools
Jovon Boyer, Detroit Public Schools
Eric Fracalossi, Tri-County International
David Konopka, A.D. Transport
Shayne White, Bluewater Technology Solutions

Welcome – Lisa Goldstein, Southwest Detroit Environmental Vision (SWDEV)

Lisa Goldstein, one of the co-chairs of the state coalition, welcomed everyone to the second meeting of the Michigan Clean Diesel Initiative (MiCDI). Ms. Goldstein explained that part of her reason for being a part of the MiCDI was that SWDEV is in heart of the particulate non-attainment areas for the federal National Ambient Air Quality Standard (NAAQS) in Wayne county (SWDEV primarily serves southwest Detroit and its neighboring communities). Ms. Goldstein invited everyone to introduce themselves and asked them to identify what organization they were representing, and reviewed the meeting agenda with participants. In order to ensure that the meeting participant's received the meeting minutes and slide presentations, Ms. Goldstein asked everyone to be sure and sign-in on the sign-in sheets that were circulating.

Overview of the Michigan Clean Diesel Initiative (MiCDI) – Judy Murphy, Cummins Bridgeway (slide presentation)

Judy Murphy, the regional sales manager for Cummins, and the second co-chair of the MiCDI, reviewed the background and goals of the MiCDI for new participants. Ms. Murphy also explained that this meeting was to answer any questions in regard to funding options, and the U.S. EPA Region V was here to provide participants with that information.

With the launch of the Midwest Clean Diesel Initiative (MCDI), it provided the states with more opportunity to move forward with clean diesel initiatives. The Diesel Emission Reduction Assistance (DERA) grants will be launched by the U.S. EPA, so the formation of a Michigan group supporting the MCDI is important. The original Planning Committee includes the two co-chairs, the MDEQ, and U.S. EPA Region V – they were tasked to organize the initial Michigan Initiative.

The objectives and tasks for the MiCDI are:

- Working with specific geographic areas and industry sectors of Michigan to identify where environmental improvements can be made through diesel emission reductions.

Tasks:

- Communicate current air quality status and identify geographic areas to focus improvement activities.
- -Identify major emission sources in the focused locations (i.e. specific industry sectors).
- Develop a list of technologies that can be used by these industry sectors.

Tasks:

- Create a list of available and pending technologies and educate members on industry specific emissions reduction technology and the benefits of (business case) for emissions reduction.
- Develop ways to drive initiatives on a local level.
- Brainstorm on innovative project options for potential funding.

- Acting as a conduit to help identify funding opportunities and resources that can be used to implement diesel reduction technologies and strategies.

Tasks:

- Identify and communicate funding sources to participant members.
- Provide resources for assistance with the application and grant processes

The U.S. EPA's Diesel Emissions Reduction Programs – Erin Newman, Region V, U.S. EPA (slide presentation)

Ms. Newman described the U.S. EPA's national and regional diesel programs, both of which are designed to address diesel emissions from legacy fleets and vehicles used today. More information on the National Clean Diesel Campaign (<http://www.epa.gov/diesel/>) or the Midwest Clean Diesel Initiative (MCDI) (<http://www.epa.gov/midwestcleandiesel/>) is available on the U.S. EPA's web site.

The overall goal of MCDI is to impact 1 million engines in the six states that comprise the U.S. EPA's Region V by 2010. The U.S. EPA Region V has focused mainly on projects that deploy retrofit and idling reduction technologies throughout various business sectors. Additionally, the U.S. EPA Region V has been working with state diesel coalitions, providing support as needed.. The U.S. EPA is tracking the impact that existing and new engines as well as emissions reduction technology have on overall emissions generated in the region. The U.S. EPA has a program that will help them track emissions and reductions. It is called the Diesel Emissions Quantifier Program and is available on line at <http://cfpub.epa.gov/quantifier/view/welcome.cfm>.

The Diesel Emission Reduction Act (DERA) – Steve Marquardt, Region V, U.S. EPA (slide presentation)

DERA is the U.S. EPA's funding mechanism this year for clean diesel projects and programs. This is the first year that the U.S. EPA has funded DERA since its inception in 2005. It is a deployment program of verified and certified diesel emission reduction technologies.

Of the total \$49.2 million dollars allotted for DERA in fiscal year 08, 70% of the funding goes to the national program and 30% goes to the state program. The National programs are competitive and are offered at both the national and regional levels whereas the state program is non-competitive.

The largest pot of funding is for the National Clean Diesel Funding Assistance Program (\$27.6 million). U.S. EPA's Region V will administer \$4.7 million of that total amount. U.S. EPA's Region V national competition is currently open and will close on June 12, 2008. More information about this Request for Proposals is available on the U.S. EPA's web site at <http://www.epa.gov/midwestcleandiesel/grants/FY08outreachdocs/mcdi-rfp-2008.pdf>. This funding will be used for the deployment of verified/certified technologies or innovative financing programs.

Question: Can Michigan fleets apply to a loan program operated outside of Michigan?

Answer: It depends on how the non-Michigan program is set up. Typically other states do not want to pay for the administrative costs associated with other areas of the multi-state region so they usually limit it to fleets within their jurisdiction.

Question: Can a company apply for Auxiliary Power Units (APUs) that our company is thinking about buying soon?

Answer: The U.S. EPA's grant money cannot be spent until it is actually awarded.

Question: Would areas with idle mandates be ineligible for funding?

Answer: No, unless the state or local jurisdiction's legislation was extremely specific such as outlining certain equipment that needed to be adding to diesel engines in that jurisdiction.

Question: Does the U.S. EPA accept verified technologies or test plans with CARB?

Answer: Yes.

Question: Will changes to the U.S. EPA's National Ambient Air Quality Standards, affecting the attainment status of local areas and counties, change the grant awards after the fact?

Answer: No, the environmental rules/regulations that exist when a grant is awarded are maintained as the standard throughout timeline of the project.

Diesel Health Concerns in Michigan - Mary Lee Hultin, Michigan Department of Environmental Quality (slide presentation)

There have been numerous studies linking health impacts of acute and chronic exposure to diesel emissions. Children and people with existing lung or heart disease are particularly susceptible to the health risks from diesel exhaust. Also at risk are smokers and individuals who work with chemicals in their job or hobbies that cause lung irritation.

The Detroit Air Toxics Initiative (DATI) report estimated an increased cancer risk of 300-600 in a million due to diesel exhaust in Detroit. Diesel exhaust aggravates asthma and areas of the state which are in non-attainment for particulate matter have also seen increases in asthma rates. Researchers have shown that increased air pollution in Detroit is associated with increased risks of lung and heart disease. In Wayne County alone, asthma incidence costs \$88 million a year.

Compounds in diesel exhaust contribute to ozone formation, fine particulate matter and air toxics. Reducing diesel emissions is an important step in improving the air quality and health of susceptible people in Michigan.

State Component of DERA Presentation – Steve Marquardt, Region V, U.S. EPA
(slide presentation)

The state program of DERA is an allocation program which does not require competition. The money can be used to implement clean diesel technology deployment or grant/low-cost revolving loan programs to meet state needs. It is up to the state to determine how it will focus this effort. The Michigan Department of Environmental Quality will be applying for this funding. The state is looking for suggestions of priorities or projects, and hopes the members of MiCDI may have some input on that process. A fact sheet on the state program is available online at: <http://www.epa.gov/midwestcleandiesel/grants/FY08outreachdocs/cleandieselstate.pdf>

Michigan's Particulate Attainment Strategy – Donna Davis, Michigan Department of Environmental Quality (MDEQ) (slide presentation)

The MDEQ recently public noticed a draft state implementation plan (SIP) on how the state plans on addressing violations of the NAAQS for particulate matter_{2.5} in Michigan. Specifically, there are two monitors in southeast Michigan located in Detroit and Dearborn (Wayne County), and a monitor in Monroe county that county that have recorded ongoing violations. There is a dispute over the number of counties in Michigan that are in non-attainment as the U.S. EPA states that based on the state's own monitoring data, there are an additional five counties in southeast Michigan that are in violation of the standard. To assist in addressing the non-attainment levels of particulate matter in these counties, the state of Michigan would like to focus its diesel emission grant efforts on local and voluntary solutions that would help alleviate the levels of particulate matter in Wayne county.

There are already numerous projects ongoing in Michigan that are focused on addressing attainment of this standard. For example, in the next two years, 28 switch engines near the Dearborn monitor will be retrofitted. Another project will be sponsored by Marathon Oil and will focus on a voluntary retrofit effort. Marathon Oil, through an agreement with the MDEQ and the Detroit Public Schools (DPS), will pay the costs associated with retrofitting the remaining 87 school buses owned by DPS that have not been retrofitted yet, and is willing to leverage its in-kind effort to retrofit additional school buses or public fleets in the City of Detroit or other communities located adjacent or nearest to the Detroit and Dearborn air quality particulate monitors.

The MDEQ will be applying for the DERA funding that is offered only to states. They are encouraging other organizations to design diesel emission projects that would enhance the efforts of the MDEQ to reach compliance with the particulate matter monitors. Working in conjunction with the MDEQ's diesel emission reduction efforts is a pollution prevention loan program offered through the MDEQ that is designated for small businesses. This program is called the Small Business Pollution Prevention Loan Program and it is for businesses with 500 or less employees in Michigan that wish to take out low interest loans for retrofit projects.

The Clean Diesel Initiative – John Zappala, Okemos Public School District

Dr. Zappala gave MiCDI participants an overview of the level of effort required to submit a grant to the U.S. EPA. He led a project in which 75 school buses were retrofitted with Diesel Oxidation Catalysts (DOCs) in 11 school districts in the Lansing area. Subsequently during another grant year, Dr. Zappala proposed an even larger grant project to retrofit 400 school

buses in 20 counties in Michigan. Both of these projects were funded by the U.S. EPA School Bus Program.

Because of his experience with managing these two school bus projects, Dr. Zappala was able to suggest several grant strategies for participants, including how to keep very good track of records, how to cultivate partnerships that will make a grant proposal stronger, and how to provide timely updates to the project officers at the U.S. EPA. Dr. Zappala also suggested that when accepting bids for equipment purchase and installation, it is important to be very specific in the bid requirements. His projects utilized DOCs because this technology seemed to give the school districts the “biggest bang for the buck” and were very easy to install.

Final Comments – Donna Davis, MDEQ

At the close of the meeting, the floor was opened up and participants were encouraged to talk about upcoming projects that offered diesel emission reductions in Michigan. A few project highlights included:

- Ford Motor Company and Georgia Tech are collaboratively working on a project to test trucks using a propane injection system.
- NextEnergy and Clean Emissions are promoting biodiesel for NOx abatement. There is new product which will allow an operator to select a biodiesel blend between B1 to B99 at the pump.
- IdleAire is putting in a truck stop electrification project in Howell, Michigan.

It is expected that the MiCDI will meet on a quarterly basis and the next in-person meeting will occur in early Fall 2008. If participants want to collaborate on projects to apply for DERA grant funding, please contact Donna Davis of the MDEQ so that she can help coordinate and connect interested parties.

Note: Since the March 25, 2008 MiCDI meeting, the MDEQ has decided not to apply for the competitive grant dollars available to eligible entities under the national DERA program so as to increase the likelihood that other diesel emission reduction projects in the state can be funded through this grant source.